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THE PLACE OF COLOR DOPPLER SONOGRAPHY AND MR ANGIOGRAPHY IN THE DIAGNOSIS OF HIGH-FLOW PRIAPISM

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Priapism is very rare condition in children. It is differentiated in two forms: high-flow (usually posttraumatic) and low-flow (veno-occlusive). In scientific literature, only aproximately 20 pediatric patients with high flow priapism were noted. High-flow type is mostly a consequence of perineal trauma (straddle type) in which the corporal artery is compressed against the pubic bone. Injury of cavernous arterial wall leads to unrestricted arterial flow into the cavernous sinusoidal space. The degree of of erection is variable without pain and without destructive effect on the cavernous tissue. For many years now, contrast angiography was preferred as golden standard in diagnostic process. Currently this method also offers the option of selective embolisation. Invasive therapeutic methods are presently under discussion because new non-invasive methods (color doppler sonography and MR angiography) are being widely introduced and, in some cases, with spontaneous resolution of intumescence have been described in literature.We can lend our support to these new opinions after the observation of six years old boy suffering incomplete priapism which suddenly occured after a straddle-type perineal injury. The painless and dysuria free priapism was investigated utilising Doppler sonography and then on MR angiography: traumatic rupture with arterio- venous fistula was discovered. Several weeks later spontaneous detumescence occured. Pathological findings on Doppler sonography and MR angiography disappeared.